## CLAIMS

## What is claimed is:

- Rotary support for mounting an electric machine in a tubular structure (5) or a bore, comprising
  - a hollow-cylindrical body (1) which is arrangeable in radial direction between the electric machine and the tubular structure (5) or the bore, for torque transmission from the electric machine to the tubular structure or the bore,

## characterized by

- an elastic connection device (3, 7, 8) which is arranged on the outer circumference of the hollow-cylindrical body (1) for elastic connection of the hollow-cylindrical body (1) with the tubular structure (5) or the bore.
- Rotary support according to claim 1, wherein the elastic connection device (3, 7, 8) is detachably connectable to the tubular structure (5) or the bore.
- Rotary support according to claim 1 or 2, wherein the elastic connection device (3, 7, 8) completely surrounds the circumference of the hollowcylindrical body (1) at one or more axial areas.
- 4. Rotary support according to one of the preceding claims, wherein components of the elastic connection device (3, 7, 8) are spaced at even distances in circumferential direction and/or axial direction on the outer surface area of the hollow-cylindrical body (1).
- Rotary support according to one of the preceding claims, wherein the elastic connection device (3, 7, 8) has one or more components which are made of rubber or similar elastic material or are coated therewith.

WO 2005/063598 PCT/EP2004/053480

Rotary support according to claim 5, wherein the one or more components are formed parts of elastic, rubber-like material or solid rubber.

- 7. Rotary support according to claim 6, wherein the formed parts are O rings.
- Rotary support according to one of the preceding claims, wherein the elastic connection device (8) has one or more components of metal.
- Rotary support according to claim 8, wherein the components are tolerance rings of a shape and radial thickness that can be modified as a result of external pressure.
- Rotary support according to one of the preceding claims, wherein the hollowcylindrical body (1) has fixing elements (2) on its outer circumference for securing the elastic connection device (3, 7, 8).
- 11. Rotary support according to one of the preceding claims, wherein the hollow-cylindrical body (1) forms, when installed, channels or passageways in longitudinal direction with the tubular structure or the bore for circulation of the coolant.
- 12. Rotary support according to one of the preceding claims, wherein the elastic connection device (3, 7, 8) or components thereof has a conical shape or is arranged conically in relation to the length axis of the hollow-cylindrical body (1).
- Roll with a motor and a rotary support according to claim 11 or 12, wherein the channels (6) or passageways are part of a cooling circuit.